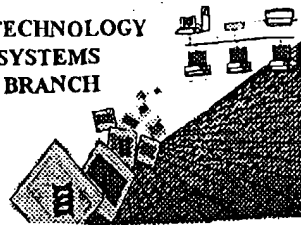


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING
ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/910,354
Source: IEW16
Date Processed by STIC: 5/28/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER:

09/910,354

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 **Wrapped Nucleics** The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 **Invalid Line Length** The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 **Misaligned Amino Numbering** The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 **Non-ASCII** The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 **Variable Length** Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 **PatentIn 2.0 "bug"** A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 **Skipped Sequences (OLD RULES)** Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped.

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 **Skipped Sequences (NEW RULES)** Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence:
<210> sequence id number
<400> sequence id number
000
- 9 **Use of n's or Xaa's (NEW RULES)** Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 **Invalid <213> Response** Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence.
- 11 **Use of <220>** Sequence(s) missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 00/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 **PatentIn 2.0 "bug"** Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 **Misuse of n/Xaa** "n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid



IFW16

RAW SEQUENCE LISTING

DATE: 05/28/2004

PATENT APPLICATION: US/09/910,354

TIME: 13:27:24

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\05282004\I910354.raw

3 <110> APPLICANT: Jarrell, et al., Kevin
 5 <120> TITLE OF INVENTION: Modular Vector Systems
 7 <130> FILE REFERENCE: 2003320-0032
 9 <140> CURRENT APPLICATION NUMBER: 09/910,354
 10 <141> CURRENT FILING DATE: 2001-07-20
 12 <160> NUMBER OF SEQ ID NOS: 24
 14 <170> SOFTWARE: PatentIn version 3.2
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 23
 18 <212> TYPE: DNA
 19 <213> ORGANISM: PCR primer EU-1 for amplification of a vector fragment containing
 W--> 20 bacterial origin of replication, Lac I gene, and pT7 promoter.
 22 <400> SEQUENCE: 1
 23 cauggtatat ctctttctta aag
 26 <210> SEQ ID NO: 2
 27 <211> LENGTH: 22
 28 <212> TYPE: DNA
 29 <213> ORGANISM: PCR primer Eu-2 for amplification of a vector fragment containing
 W--> 30 bacterial origin of replication, Lac I gene, and pT7 promoter.
 32 <400> SEQUENCE: 2
 33 cucatgacca aaatccctta ac
 36 <210> SEQ ID NO: 3
 37 <211> LENGTH: 22
 38 <212> TYPE: DNA
 39 <213> ORGANISM: PCR primer EU-3 for amplification of a vector fragment containing Amp
 W--> 40 gene.
 42 <400> SEQUENCE: 3
 43 gagattatca aaaaggatct tc
 46 <210> SEQ ID NO: 4
 47 <211> LENGTH: 20
 48 <212> TYPE: DNA
 49 <213> ORGANISM: PCR primer EU-4 for amplification of a vector fragment containing Amp
 W--> 50 gene.
 52 <400> SEQUENCE: 4
 53 uaactagcat aacccttg
 56 <210> SEQ ID NO: 5
 57 <211> LENGTH: 21
 58 <212> TYPE: DNA
 59 <213> ORGANISM: PCR primer 5' Lac Z for amplification of an insert fragment containing
 W--> 60 Lac Z gene.
 62 <400> SEQUENCE: 5
 63 augaccatga ttacgccaac g
 66 <210> SEQ ID NO: 6

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004
 TIME: 13:27:24

Input Set : A:\PTO.YF.txt
 Output Set: N:\CRF4\05282004\I910354.raw

✓ SAME
 ✓ ERRORS

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67 <211> LENGTH: 22
68 <212> TYPE: DNA
69 <213> ORGANISM: PCR primer 3' Lac Z for amplification of an insert fragment containing
v--> 70 Lac Z gene.
72 <400> SEQUENCE: 6
73 uuacaatttc cattcgccat tc 22
76 <210> SEQ ID NO: 7
77 <211> LENGTH: 37
78 <212> TYPE: DNA
79 <213> ORGANISM: PCR primer 5' OST for amplifying an Ori fragment from pET 19 b.
81 <400> SEQUENCE: 7
82 ctgctaagtg agcucgacag atcgctgaga taggtgc 37
85 <210> SEQ ID NO: 8
86 <211> LENGTH: 36
87 <212> TYPE: DNA
88 <213> ORGANISM: PCR primer 1N 3' Ori(s) for amplifying an Ori fragment from pET 19b.
90 <400> SEQUENCE: 8
91 aagcttgcta agtagggcgt tttccatag gctccg 36
94 <210> SEQ ID NO: 9
95 <211> LENGTH: 36
96 <212> TYPE: DNA
97 <213> ORGANISM: PCR primer 1NT5'KAN for amplifying a fragment containing the kanamycin
v--> 98 resistance gene from pCR2.1 topo.
100 <400> SEQUENCE: 9
101 ctacctagca agctuctatc tggacaaggg aaaacg 36
104 <210> SEQ ID NO: 10
105 <211> LENGTH: 41
106 <212> TYPE: DNA
107 <213> ORGANISM: PCR primer T73' KAN for amplifying a fragment containing the
kanamycin
v--> 108 resistance gene from pCR2.1 topo.
110 <400> SEQUENCE: 10
111 ccctatagtg agtcgtatta aggcgaaaac tctcaaggat c 41
114 <210> SEQ ID NO: 11
115 <211> LENGTH: 42
116 <212> TYPE: DNA
117 <213> ORGANISM: PCR primer tcs1 for amplifying a fragment containing the luciferase
gene
v--> 118 from pG1 II basic.
120 <400> SEQUENCE: 11
121 ttaatacgac tcactatagg gatggaagac gccaaaaaca ta 42
124 <210> SEQ ID NO: 12
125 <211> LENGTH: 36
126 <212> TYPE: DNA
127 <213> ORGANISM: PCR primer tc58 for amplifying a fragment containing the luciferase
gene
v--> 128 from pG1 II basic.
130 <400> SEQUENCE: 12
131 gagctcactt agcagttaca attggactt tccgcc 36
134 <210> SEQ ID NO: 13
135 <211> LENGTH: 36
136 <212> TYPE: DNA

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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004
TIME: 13:27:24

*✓ SAME
errors*

Input Set : A:\PTO.YF.txt
Output Set: N:\CRF4\05282004\I910354.raw

137 <213> ORGANISM: PCR primer 1NT 5'KAN for amplifying a fragment containing the anamycin

--> 138 resistance gene from PCR 2.1 topo.

140 <400> SEQUENCE: 13

141 ctacctagca agctuctatc tggacaaggg aaaacg 36

144 <210> SEQ ID NO: 14

145 <211> LENGTH: 33

146 <212> TYPE: DNA

147 <213> ORGANISM: PCR primer 1NT 3'KAN for amplifying a fragment containing the anamycin

--> 148 resistance gene from PCR 2.1 topo.

150 <400> SEQUENCE: 14

151 gagctcactt agcaaggcga aaactctcaa gga 33

154 <210> SEQ ID NO: 15

155 <211> LENGTH: 37

156 <212> TYPE: DNA

157 <213> ORGANISM: PCR primer 1NT5' Ori for amplifying a fragment containing the Ori rom

--> 158 PET 19b.

160 <400> SEQUENCE: 15

161 ttgctaagt agcucgacag atcgctgaga taggtgc 37

164 <210> SEQ ID NO: 16

165 <211> LENGTH: 36

166 <212> TYPE: DNA

167 <213> ORGANISM: PCR primer 1N3' Ori(s) for amplifying a fragment containing the Ori rom

--> 168 PET 19b

170 <400> SEQUENCE: 16

171 aagcttgcta agtagggcgt ttttccatag gctccg 36

174 <210> SEQ ID NO: 17

175 <211> LENGTH: 37

176 <212> TYPE: DNA

177 <213> ORGANISM: PCR primer 3nt 5'OST for amplifying an Ori fragment.

179 <400> SEQUENCE: 17

180 ctgctaagt agcucgacag atcgctgaga taggtgc 37

183 <210> SEQ ID NO: 18

184 <211> LENGTH: 36

185 <212> TYPE: DNA

186 <213> ORGANISM: PCR primer 3nt 5'OST for amplifying an Ori fragment.

188 <400> SEQUENCE: 18

189 aagcttgcta gguaggctac gtcttgctgg cggtcg 36

192 <210> SEQ ID NO: 19

193 <211> LENGTH: 36

194 <212> TYPE: DNA

195 <213> ORGANISM: PCR primer 3nt 5'KHT for amplifying a KAN fragment.

197 <400> SEQUENCE: 19

198 ctacctagca agcuuctatc tggacaaggg aaaacg 36

201 <210> SEQ ID NO: 20

202 <211> LENGTH: 35

203 <212> TYPE: DNA

204 <213> ORGANISM: PCR primer 3nt 3'KST for amplifying an Ori(s) fragment.

206 <400> SEQUENCE: 20

207 gagctcactt agcagggcga aaactctcaa ggatc 35

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004
TIME: 13:27:24

Input Set : A:\PTO.YF.txt
Output Set: N:\CRF4\05282004\I910354.raw

✓ SAME
ERRORS

210 <210> SEQ ID NO: 21
211 <211> LENGTH: 37
212 <212> TYPE: DNA
213 <213> ORGANISM: PCR primer 1NT 5'ORI for amplifying an Ori(s) fragment.
215 <400> SEQUENCE: 21
216 ttgctaagtg agctcgacag atcgctgaga taggtgc 37
219 <210> SEQ ID NO: 22
220 <211> LENGTH: 36
221 <212> TYPE: DNA
222 <213> ORGANISM: PCR primer 1NT3' Ori(s) for amplifying an Ori(s) fragment.
224 <400> SEQUENCE: 22
225 aagcttgcta ggtagggcgt ttttccatag gctccg 36
228 <210> SEQ ID NO: 23
229 <211> LENGTH: 36
230 <212> TYPE: DNA
231 <213> ORGANISM: PCR primer 1NT 5'KAN for amplifying an KAN fragment.
233 <400> SEQUENCE: 23
234 ctacctagca agctuctatc tggacaaggg aaaacg 36
237 <210> SEQ ID NO: 24
238 <211> LENGTH: 33
239 <212> TYPE: DNA
240 <213> ORGANISM: PCR primer 1NT3'KAN for amplifying an Ori(s).
242 <400> SEQUENCE: 24
243 gagctcactt agcaaggcga aaactctcaa gga 33

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004
TIME: 13:27:25

Input Set : A:\PTO.YF.txt
Output Set: N:\CRF4\05282004\I910354.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:11; Line(s) 117

Seq#:12; Line(s) 127

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/910,354

DATE: 05/28/2004

TIME: 13:27:25

Input Set : A:\PTO.YF.txt

Output Set: N:\CRF4\05282004\I910354.raw

L:20 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:
 L:30 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:
 L:40 M:259 W: Allowed number of lines exceeded, <213> ORGANISM:
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